





Betsy's conjecture

Betsy's Conjecture: An odd number plus an odd number equals an even number.

Context

- Third graders (8 year-olds)
- Late January
- Students have been working on concepts of even and odd numbers, and patterns with even and odd numbers
- Diverse classroom, many English language learners

7.2a



Focus questions

To what extent does the explanation:

- Have a clear purpose
- Have a logical structure
- Use representations and language clearly and carefully
- Have a focus on meaning that is oriented to the listener(s)

7.2b







Focus questions

- How can students' contributions be seen as moving the mathematics forward?
- What is the teacher doing to establish an environment that encourages mathematical reasoning? What else might the teacher do?

7.3a





- Before viewing: Set the context for the video
- While viewing: View the video with the focus questions in mind
- After viewing: Discuss the focus questions

7.4a



Video workshop

- Focus questions:
 - What conjectures do students share related to the problem?
 - How do students justify their conjectures (logic, language, representations, etc.)?
 - What teaching moves are being used to support students' engagement in reasoning or the mathematical practices?
- Keep in mind that the focus of video workshops is on the teaching, not the teacher.

7.4b





- Understanding the process: Improving the process through debriefing
 - How did each step of the video workshop process (i.e., set up, viewing, discussion) work today?
- Analyzing teaching and learning: Teaching moves that support mathematical reasoning
 - What were you able to notice in your groups related to supporting students' engagement in explaining or other mathematical practices?

• Building productive norms: Focusing on teaching

 Did the conversation tend to focus on teaching or the teacher? What types of comments help focus the conversation on teaching?

7.5a



Summary

In this session, you:

- Considered ways to follow up on explanations that:
 - Develop the mathematics further
 - Make the contributions accessible for all students
- Engaged in a video workshop with a focus on:
 - Noticing students' conjectures
 - Identifying teaching moves used to support students' engagement with reasoning and/or mathematical practices
 - Learning to debrief the process to improve subsequent video workshops

7.6a